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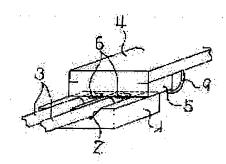
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## (54) OPTICAL SIGNAL TRANSMITTING DEVICE WITH OPTICAL FIBER AND MANUFACTURE OF ITS GUIDE SUBSTRATE

(57) Abstract:

PURPOSE: To provide an optical signal transmitting device with optical fiber and the manufacture of its guide substrate by which a large amount of data can be transmitted at high speed and in which miniaturization can be attained and manufacturing can be simplified. CONSTITUTION: The optical signal transmitting device with optical fiber comprised by joining an end face type semiconductor optical device 5 which emits and receives light directly with an optical fiber 3 arranged in parallel with a reference plane is constituted in such a way that a guide substrate 1 for optical fiber arrangement which regulates the arranging pitch of plural optical fibers 3 and fixes each optical fiber 3 is provided, and the optical fiber 3 and the end face type semiconductor optical



device 5 are arranged on the guide substrate 1, and an optical signal outputted from or inputted to the end face type semiconductor optical device 5 via the optical fiber 3 can be transmitted.

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